Request to Archive
With The National Centers for Environmental Information
For Ground-Based GPS Meteorology
Provided by Earth System Research Laboratory

2016-03-01

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

kirk holub
ESRL
Physical Scientist
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2. Name the organization or group responsible for creating the dataset.

DOC/NOAA/OAR/ESRL/GSD/ > Global Systems Division, Earth System Research Laboratory, OAR, NOAA, U.S. Department of Commerce

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

The desire is to archive results from the long-running OAR demonstration project http://gpsmet.noaa.gov. Data to be archived include total precipitable water estimates plus underling data temperature, pressure, total signal delay, surface temperature, surface pressure.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 1998-01-01
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

N/A

6. Approximate date when the dataset was or will be released to the public:

1998-01-01

7. Who are the expected users of the archived data? How will the archived data be used?

The weather research community. Data will likely be used to study meteorological processes and maybe used for NWP model verification/validation.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

No

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

N/A

10. List the input datasets and ancillary information used to produce the data.

GPS satellite observation are combined with GPS satellite orbit and earth orientation parameters to estimate GPS signal delay (Zenith Total Delay -- ZTD). Signal delays combined with surface meteorological information are used to estimate total precipitable water.

11. List web pages and other links that provide information on the data.

http://gpsmet.noaa.gov

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.

1. TPW and ZTD estimates along with surface MET observations.
   site locations metadata
   other docs TBD

13. Indicate the data file format(s).

1. CSV

14. Are the data files compressed?

No

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

site locations file: ftp://gpsftp-srv1.gsd.esrl.noaa.gov/DATA_DESCRIPTION_FILES/GPSIPW_DATADESC_GPSMETStation.txt

Data file (1 of 48 per day): ftp://gpsftp-srv1.gsd.esrl.noaa.gov/GPSIPW_CSV_gpsmet2.1606115150030o

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

Sample data are available.

17. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 15GB
Number of Data Files: 300000

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate: 2MB per Day
Data File Frequency: 48 per Day
Data Production Start: 2016-03-01

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: NOAA/OAR/ESRL Boulder, Co
System Name: gpsmet-s1.gsd.esrl.noaa.gov
System Owner: ESRL
Additional Information:

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL
2. FTP PUSH

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. Unknown

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

NOAA/OAR/ESRL/GSD does not have a long-term data archive. The GPSMet data have been used in both research and NWS operations since 2005. ESRL plans to halt its data production after NWS begins purchasing like data from the private sector. GSD believes the 17 years of TPW and ZTD estimates will be useful for research purposes.

24. Are the data archived at another facility or are there plans to do so? Please explain.

DOE ARM project has been receiving the data since the project's inception.

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

Kevin Kelleher [kevin.kelleher@noaa.gov] discussed this project with Scott Hausman

26. Do you have a data management plan for your data?

No

27. Have funds been allocated to archive the data at NCEI?

No

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

N/A

29. Is there a desired deadline for NCEI to archive and provide access to the data?

No deadlines for archive or access.

30. Add any other pertinent information for this request.

The sample data files provided are from a near real-time system. So they would have to be regenerated to capture data older than 30 days. Since they will need to be regenerated it maybe for efficient to utilize another approach; such as data by sites for all times. We are open to whatever approach makes the most sense.